

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1 - 2. (Cancelled)

3. (Currently amended) A method for optimizing power for a vehicle during at least a portion of a trip making use of time reserves that are included when planning the trip comprising:

determining the time available for the portion of the trip;

identifying a first function to determine efficiency for the vehicle as a function of an its operating point of the vehicle; and

calculating ~~one or more~~ a travel modes for the portion of the trip, ~~each of the travel modes comprising at least an acceleration rate applied for a first time period and a braking rate applied for second time period,~~

—wherein the ~~first~~ function is used to calculate the travel modes to minimize power required by the vehicle to travel over the portion of the trip in the time available.

4. (Cancelled)

5. (Previously amended) The method of claim 3, wherein the efficiency for the vehicle is determined as a function of tractive force or vehicle speed or temperature.

6. (Previously amended) The method of claim 3, wherein the efficiency for the vehicle is determined as a function of tractive force and vehicle speed.

7. (Cancelled)

8. (Currently amended) The method of claim 3, ~~further comprising:~~
~~dividing the portion of the trip into one or more sections, one or more of the sections~~
wherein each portion is defined as having a maximum speed; and
~~calculating the travel modes is calculated so that the vehicle does not exceed the~~
maximum speed for a section while the vehicle is traveling on the section.

9. (Currently amended) The method of claim 7, ~~further comprising:~~

~~dividing the portion of the trip into one or more sections, one or more of the sections wherein each portion is defined as having a maximum speed; and~~

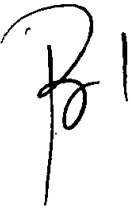
~~calculating the travel modes is calculated so that the vehicle does not exceed the maximum speed for a section while the vehicle is traveling on the section.~~

10. (Cancelled)

11. (Currently amended) A method for optimizing power for a vehicle during at least a portion of a trip making use of time reserves that are included when planning the trip comprising:

determining the time available for the portion of the trip;

identifying a second function to determine power loss for the vehicle as a function of an its operating point of the vehicle; and

 ~~calculating one or more a travel modes for the portion of the trip, each of the travel modes comprising at least an acceleration rate applied for a first time period and a braking rate applied for second time period,~~

—wherein the first function is used to calculate the travel modes to minimize power required by the vehicle to travel over the portion of the trip in the time available.

12. (Cancelled)

13. (Previously amended) The method of claim 11, wherein the power loss for the vehicle is determined as a function of tractive force or vehicle speed or temperature.

14. (Previously amended) The method of claim 11, wherein the power loss for the vehicle is determined as a function of tractive force and vehicle speed.

15. (Cancelled)

16. (Currently amended) The method of claim 11 ~~further comprising:~~
~~dividing the portion of the trip into one or more sections, one or more of the sections wherein each portion is defined as having a maximum speed; and~~
~~calculating the travel modes is calculated so that the vehicle does not exceed the maximum speed for a section while the vehicle is traveling on the section.~~

17 - 22. (Cancelled)

23. (New) A method for the energy optimization of a vehicle making use of time reserves, which are included when planning a timetable, the method comprising:

determining a multi-dimensional characteristic diagram of a vehicle operating point dependency of power loss on at least tractive force and vehicle speed;

dividing the journey route into several sections each defined by a constant maximum speed;

minimizing an input energy to the vehicle with the help of an optimization algorithm to achieve an energy-saving driving mode, whereby the operating point dependency of the power loss is taken into account in such a way that within a section, the tractive force is varied as a function of the speed.

24. (New) The method according to claim 23, wherein the multi-dimensional characteristic diagram is three dimensional

25. (New) The method according to claim 23, wherein the consideration of the operating point dependency of the power loss further depends on temperature.

26. (New) The method according to claim 23, whereby within the section a reducing acceleration results which blends smoothly into braking.
